REMARKS

The present application included pending claims 21-28. Claims 21-26, and 28 were rejected, while claim 27 was objected to as being dependent upon a rejected base claim. By this Amendment, new claim 29 has been added. New claim 29 includes all the limitations of previously pending claim 27 written in independent form, while claim 27 has been canceled. No fee is believed due with respect to new claim 29 because the total number of claims in the present application does not exceed twenty, nor does the total number of independent claims exceed three. The Applicants respectfully submit that the pending claims should be in condition for allowance, as explained below.

Claims 21-26, and 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5,673,041 ("Chatigny") in view of United States Patent No. 6,492,978 ("Seilg"). The Applicants respectfully traverse these rejections for at least the following reasons:

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure (MPEP) states the following:

> First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must **both be found in the prior art, and not based on applicant's disclosure**.

Manual of Patent Examining Procedure MPEP at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). Additionally, if a *prima facie* case of obviousness is not established, Applicant is under no obligation to submit evidence of nonobviousness.

> The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See Manual of Patent Examining Procedure MPEP at § 2142.

Claim 21 recites, in part, "an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface," of an acoustic wave switch "such that in response to a force acting on the dome, the dome deforms and contacts the absorbing material and the absorbing material contacts the touch sensitive surface of the acoustic wave switch with sufficient pressure to actuate the acoustic wave switch." Claim 24 recites, in part, an "acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch."

Chatigny "relates to touch sensitive switches and, more particularly, to such a switch that operates in accordance with reflective mode ultrasonic principles." Chatigny discloses a system in which a piezoelectric element 10 is positioned on one side of a substrate 16, while a touch region 22 is located on an opposite side of the substrate 16. For example, Chatigny states the following:

> In accordance with this invention, and as shown in FIGS. 1 and 2, a piezoelectric element 10, preferably a piezoelectric polymer material... has electrodes 12 and 14 on opposed surfaces. A substrate 16, illustratively glass, has first and second opposed parallel surfaces 18 and 20. On the first surface 18 of the substrate 16 there is defined touch region 22, preferably of a size approximately equal to the contact area of an operator's finger 24. The electrode 12 is bonded to the second surface 20 of the substrate 16 across the substrate 16 from the touch region 22. The tough region 22 can be defined as part of a computer generated display, in which case the substrate 16, the piezoelectric element 10 and the electrodes 12 and 14 will be transparent, or the touch region 22 can be defined by indicia on the surface 18.

Chatigny at column 3, lines 14-29. As shown in Figures 1 and 2 reproduced below, there is no acoustic wave absorbing material positioned over, or within, the substrate 16 or between the substrate 16 and the piezoelectric element 10.

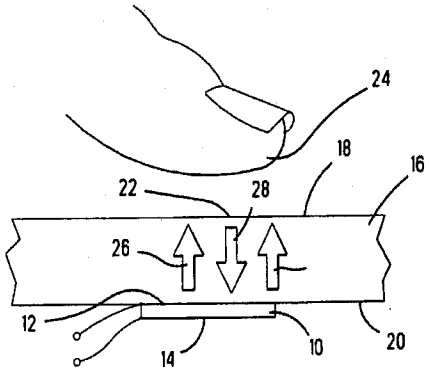

Fig. 1

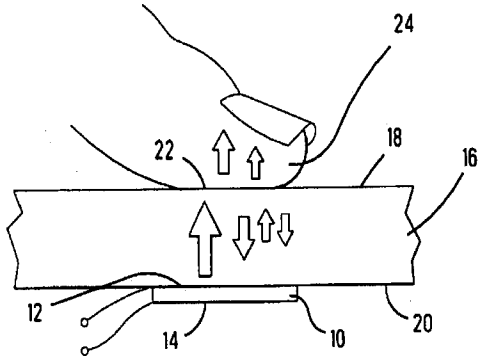

Fig. 2

Neither, Chatigny (nor Selig) teaches or suggests "an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface," such as recited in claim 21, or an "an actuator **overlying the touch sensitive surface of the acoustic wave switch and an acoustic wave absorbing material** mounted on the actuator." Chatigny does not teach or suggest any acoustic wave absorbing material within the substrate 16, or in close proximity to the touch region 22.

The Office Action asserts that Chatigny discloses "an acoustic wave absorbing material (see finger at the surface (18) by absorbing some of the ultrasonic energy, see col. 4, lines 10-15)...." *See* November 15, 2006 Office Action at page 2. However, Chatigny at column 4, lines 10-15 of states the following:

> FIG. 2 illustrates the situation where the operator's finger 24 engages the touch region 22. In this case, instead of an air boundary at the surface 18 which provide high reflectivity to the waves within the substrate 16, contact by the finger 24 lowers the reflectivity at the surface 18 by absorbing some of the ultrasonic energy. This changes the multiple reflections back to the piezoelectric element 10 which in turn changes the induced electric current in the piezoelectric element 10, thereby changing the effective impedance of the piezoelectric element 10.

Chatigny at column 4, lines 10-19. There is nothing in the passage cited above, or any other portion of Chatigny, that teaches or suggests an acoustic wave absorbing material positioned between a contact surface, such as a deformable dome, and a touch sensitive surface.

The finger shown and described with respect to Figures 1 and 2 of Chatigny is clearly not part of the switch. Even if one assumed, merely for the sake of argument, that a human finger, considered as an "absorbing agent," was part of the switch, the finger is positioned over the touch region 22 and the substrate 16. Thus, the finger is not "disposed between [a] deformable dome and a touch sensitive surface," as recited in claim 21, nor is it positioned under an "actuator," as recited in claim 24. Further, a finger could not be "disposed between a deformable dome and a touch sensitive surface," because the finger would then be secured underneath the dome and attached to the switch.

The proposed combination of Chatigny and Selig does not teach or suggest "an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface," of an acoustic wave switch "such that in response to a force acting on the dome, the dome deforms and contacts the absorbing material and the absorbing material contacts the touch sensitive surface of the acoustic wave switch with sufficient pressure to actuate the acoustic wave switch," as recited in claim 21. Nor does that proposed combination teach or suggest an "acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch," as recited in claim 24. Thus, for at least these reasons, pending claims 21-26, and 28-29 should be in condition for allowance.

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, Applicants will not address such statements at the present time. However, the Applicants expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statement should become relevant by appearing in a rejection of any current or future claim).

The Applicants respectfully submit that the pending claims of the present application define patentable subject matter, and request reconsideration of the objections and rejections. If the Examiner has any questions or the Applicants can be of any assistance, the Examiner is invited to contact the undersigned attorney for the Applicants. **No fee is believed due with respect to new claim 29, as indicated above.** The Commissioner is authorized, however, to charge any necessary fees, or credit any overpayment to Account No. 13-0017.

Respectfully submitted,

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